

GRADE LEVEL AND CONTENT AREA:

K/Science Properties

☺ This unit is about using the 5 sense to explore and learn about the properties of objects. The unit explores the five senses using lesson and the properties of wood using the Foss Wood kit*. Please feel free to expand this and make it your own. This unit will use literature skills such as labeling, reading, connecting literature to science and self, it will also use math skills such as comparing and contrasting, graphing, analyzing, data collection, organization and presentation.

☺ * *If you do not have the kit available you might try exploring different mulches. Nursery owners are usually happy to help out and will give you a grocery bag full for free.*

STANDARDS AND INDICATORS (LISTED BY NUMBER):

K.1 Objects have properties that can be observed and used to describe similarities and differences.

A.2 Sort objects made of materials such as wood, paper and metal into groups based on properties such as flexibility, attraction to magnets, and whether they float or sink in water.

K.4 Humans select both natural and man-made materials to build shelters based on local climate conditions, properties of the materials, and their availability in the environment.

A9 Describe the types of materials used by people to build houses, and the properties that make the materials useful.

<p>CONCEPTUAL THEME:</p> <p><i>Properties of Matter - How does the structure of matter affect the properties and uses of materials?</i></p> <p>CONTENT STANDARD:</p> <p>K.1 – Objects have properties that can be observed and used to describe similarities and differences.</p>	<p>GRADE-LEVEL CONCEPT: ♦ Some properties can be observed with the senses, and others can be discovered by using simple tools or tests.</p> <p>GRADE-LEVEL EXPECTATIONS:</p> <ol style="list-style-type: none"> 1. Humans have five senses that they use to observe their environment. A specific sense organ is associated with each sense. 2. Objects have properties that can be observed using the senses. Examples include size, weight, shape, color, texture, transparency, etc. An object’s observable properties do not include the object’s name or its uses. 3. Sorting objects into groups based on one (or more) of their properties makes it possible to observe and describe their similarities and differences. 4. Placing objects in order based on their size or weight makes it possible to observe patterns and describe relationships among the objects in a group. 5. Objects can be described and sorted based on the materials from which they are made (for example, wood, paper, fabric, plastic, glass or metal). Objects can be made of a mixture of materials. 6. Objects can be described and sorted based on the results of simple tests. Simple tests include actions such as bending, squeezing, holding it near a magnet or putting it in water. Objects can be described as magnetic/nonmagnetic, flexible/not flexible, hard/soft, a floater/sinker, etc. 7. The heaviness of objects can be compared using the sense of touch. Balances and scales are measurement tools that allow people to observe and compare the heaviness of objects more accurately. Objects can be sorted into groups that have the same heaviness, or into groups that are “more heavy than” or “less heavy than” a given object. 8. The temperature of the air, water or bodies can be compared using the sense of touch. A thermometer is a measurement tool that allows people to compare temperatures more accurately. 9. Objects can be sorted into groups based on measurements of their size. Nonstandard units for measuring size include hands, footsteps, pennies or paper clips. <p>KEY SCIENCE VOCABULARY: senses, observe, observation, property, sort, classify, material, float, sink, flexible, heavy, magnetic, nonmagnetic, thermometer</p>	<p>CMT EXPECTED PERFORMANCES</p> <p>A 1. Use the senses and simple measuring tools, such as rulers and equal-arm balances, to observe common objects and sort them into groups based on size, weight, shape or color.</p> <p>A 2. Sort objects made of materials such as wood, paper and metal into groups based on properties such as flexibility, attraction to magnets, and whether they float or sink in water.</p> <p>A 3. Count objects in a group and use mathematical terms to describe quantitative relationships such as: same as, more than, less than, equal, etc.</p>
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KEY SCIENCE VOCABULARY: senses, observe, observation, property, sort, classify, material, float, sink, flexible, heavy, magnetic, nonmagnetic, thermometer

SCIENCE CONTENT STANDARD K.4

**CONCEPTUAL
THEME:**

*Science and
Technology
in Society - How do
science and
technology affect the
quality of our lives?*

**CONTENT
STANDARD:**

**K.4 – Some objects
are natural, while
others have been
designed and made
by people to
improve the quality
of life.**

GRADE-LEVEL CONCEPT: ◆ Humans select both natural and man-made materials to build shelters based on local climate conditions, properties of the materials, and their availability in the environment.

GRADE-LEVEL EXPECTATIONS:

1. People need shelters to keep warm or cool, dry and safe. Shelters are made of materials that have properties that make them useful for different purposes.
2. People in different regions of the world build different kinds of shelters, depending on the materials available to them, the local climate and their customs.
3. Traditionally, people have built shelters using materials that they find nearby. Today, people build houses from materials that may come from far away.
 - a. People who live in forested regions have traditionally built shelters using wood and/or leaves from nearby trees.
 - b. People who live in regions with clay soils have traditionally built shelters using bricks or adobe made from clay.
 - c. People who live in snowy regions have traditionally built shelters using snow and ice.
 - d. People who live in regions with large animals have traditionally built shelters using animal skins.
4. Although they may look quite different, most shelters have walls, roofs and an entrance/exit; some shelters have doors, windows and floors. Walls, roofs and windows are made of materials that have specific properties. For example, walls require materials that are rigid, windows require materials that are transparent, and roofs require materials that are water-resistant.
5. Animals build shelters using materials that are easily available to them. The materials they use have properties that help the animals stay warm or cool, dry and safe.

KEY SCIENCE VOCABULARY: shelter, rigid, transparent

**CMT EXPECTED
PERFORMANCES**

A9 Describe the types of materials used by people to build houses, and the properties that make the materials useful.

CONCEPTS: Need To know about ...

- The five senses can be used to explore/learn about the world around us.
- Objects have properties that can be determined by using your five senses.
- Objects have properties that can help them be sorted, compared.
- Objects can be similar and different from one another.

SKILLS: Be able to do:

- Recognize and use their five senses

- Record data
- Compare/analyze data
- Communicate findings through illustrations, graphs, and/or verbally

Misconceptions:

- Complex tests are needed to determine properties.
- The 5 senses are not a tool in science.
- Properties limit an object to one grouping.

TOPICS OR CONTEXT: (WHAT YOU WILL USE TO TEACH CONCEPTS AND SKILL-PARTICULAR UNIT, LESSONS, ACTIVITIES)

- Lessons provided with the unit
- Foss kit-wood
- Literature from the kindergarten vocabulary and comprehension

BIG IDEAS

- ✦ That some properties of objects can be determined using just your five senses.

Cumulative questions/ Essential questions to guide instruction and assessment:

- ? What are the five senses?
- ? How can we use our five senses to help use learn about objects?
- ? What did we learn about wood?
- ? Can we do what we did with wood with other things?

Lesson Plan Outline for Properties

Lesson	Objective/Purpose	Goal		Done
1	5 Senses- introduce the 5 senses using K-curriculum book: My Five Sense by Alik	Students will be able to recognize and identify their five senses and the body part associated with each sense.		

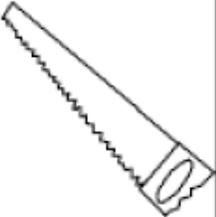
2	5 Senses- Sight and Hearing	Students will focus in on the sense of sight and hearing. Students will be able to identify qualities/properties that can be determined by sight and/or hearing.		
3	5 Senses- Smell/Taste/Touch	Students will focus in on the sense of smell, taste, and touch. Students will be able to identify and determined objects by smell, taste, and touch.		
4	5 senses-	Students will identify vocabulary that is used to describe objects using senses.		
5	Using the Foss Wood Kit: Activity 1 part 1	Introduction to Wood samples		
6	Activity 1 part 2	Wood Hunt		
7	Activity 1 parts 3,4, and 5	Wood and Water, Sink the Pine and Plywood, Sinking Investigation		
8	Activity 2 parts 1 and 2	Sanding wood, Sawdust and Shavings		
9	Activity 2 parts 3 and 4	Making Sawdust Wood, Making Sandwich Wood		
10	Activity 2 parts 5, 6, and 7	Nailing, Staining, and Wood Sculptures		

Rubric:

Star or Sticker	Smiley Face	Blah Face
Was able to complete worksheet on own. Can verbalize using correct vocabulary. Work or answers are correct.	Need some support to answer questions or complete worksheets. Not using vocabulary correctly, but using appropriate vocabulary.	Needed help completing worksheets, unable to answer questions. Does not use appropriate vocabulary. Unable to differentiate between senses and body parts.

Describe the senses you use.

Name _____

<p>Describe how you sense each object. If you don't use a sense for an object, put an "X" in that box.</p>	<p>sight  How does it look?</p>	<p>hearing  How does it sound?</p>	<p>touch  How does it feel?</p>	<p>smell  How does it smell?</p>	<p>taste  How does it taste?</p>
 banana					
 bee					
 saw					
 foot					
<p>Pick another object.</p>					

Properties Final assessment sheet

Goal/Big Ideas for unit	Shows understanding	Needs support	Does not grasp concept

NOTES/COMMENTS: _____

Final assessment/cumulative project grade and comments:

Lesson 1: Introduction to the five senses

Objective: Students will be able to identify the 5 senses and the body part related to each sense.

Target: Students will be able to list the 5 senses and the body part used for that sense.

Supplies:

- K-curriculum book- My Five Senses by Alike
- Chart paper
- Markers
- 5 senses worksheet

Procedure:

- I. Teacher will tell the kids that after the reading she will ask them what the 5 senses are and what body parts are used for each sense.
- II. Teacher will read the story My Five Senses to the students
- III. Teacher will ask and record the students' responses
- IV. When student says body part try writing the word and then drawing a simple illustration of body part.
- V. Have students complete worksheet (determine which is appropriate for your class: whole group, by themselves, or as a center activity.)

Wrap up or closure:

Have a few students recite from memory the five senses and have the rest point to the correct body part or vice/ versa.

Center or extension Activity ideas:

Sing or use the poem by Hi 5 for vocabulary/comprehension/fluency

INTRO:
Five Four Three Two One
Come wit us & have some fun.

CHORUS:
I have five senses say them with me
Five senses here we go.
Say 5 (Five) Hi 5(Hi 5)
I have find senses say them with me
Five senses Here we go.
Say 5 (Five) Hi 5(Hi 5)

1 to see 2 to hear
3 to taste 4 to feel
5 to smell..... were doing well!

Five senses say them with me Five
senses here we go.
Say 5 (Five), Hi 5(Hi 5),
Five, Four, Three, Two, One,
Come wit us & have some fun.

VERSE 1:
CHORUS

Complete worksheet

Have kids identify the sense(s) they are using throughout the day
Create a center with animal or dolls and have the students place stickers (mailing labels) on the appropriate body part.
Ask the art teacher to discuss or teach about the senses used to create, enjoy, and analyze art.
Search the web for senses worksheets (enchanted learning and abc teach have a lot, they cost to join, but are worth it!!!, sorry could give you the worksheet but they are copyrighted for classroom, not district use.)

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With my eyes I can see
With my ears I can hear
With my hands I can touch
I can feel when your near
I can taste sweet and sour
I can smell with my nose
Lets do it one more time
Here's how it, Here's how it,
Here's how it goes.....

CHORUS

VERSE 2:
I can see the moon at night
I can here the band play
I can touch and feel
hot and cold, ethier way
I can taste, I can smell
What I like and what I don't
Lets do it one more time
Here's how it, Here's how it,
Here's how it goes.....

Label the Five Senses

Label the senses (hearing, sight, smell, taste, and touch).

Name _____

The Five Senses

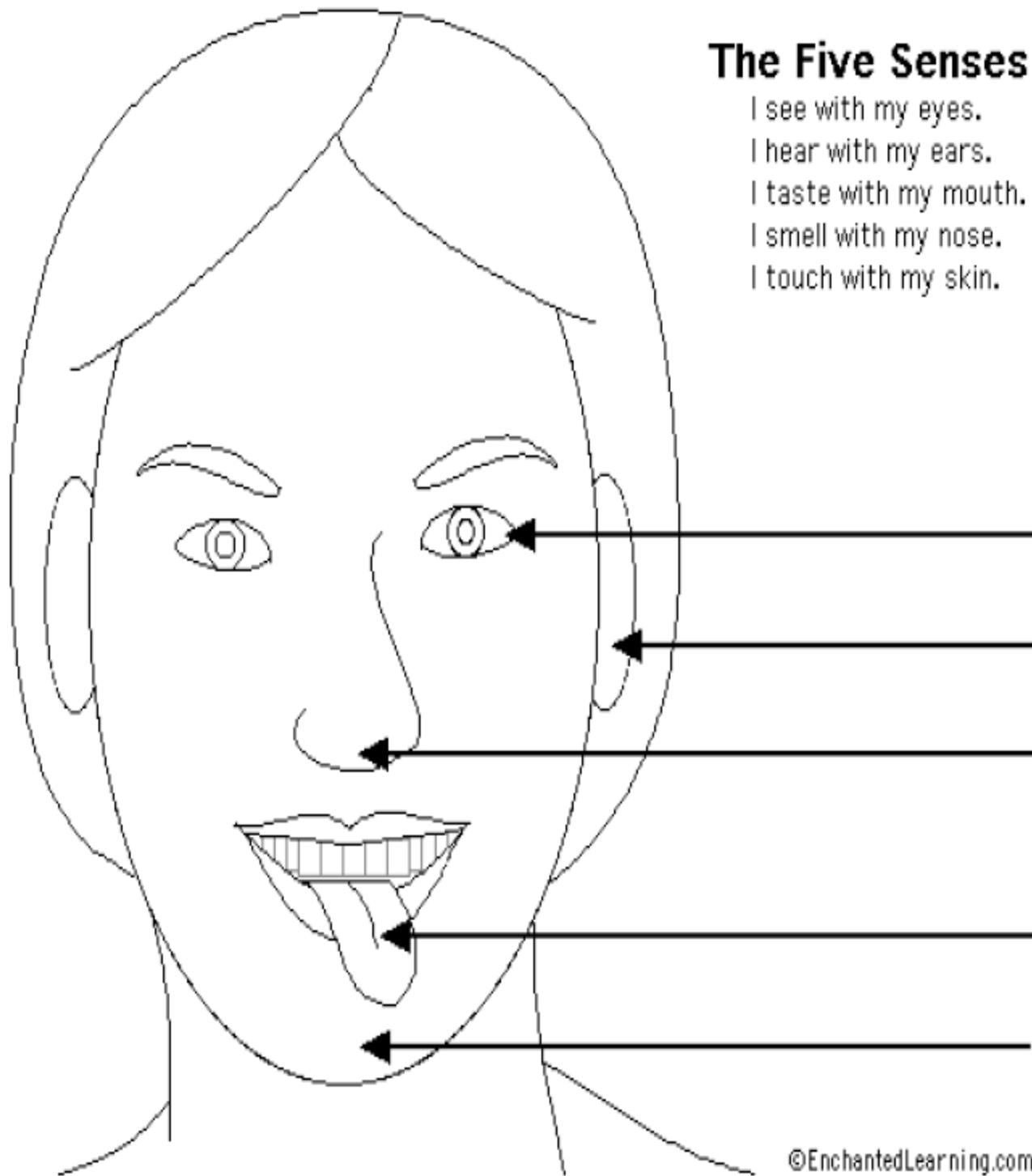
I see with my eyes.

I hear with my ears.

I taste with my mouth.

I smell with my nose.

I touch with my skin.



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hearing
smell
taste

touch

Lesson 2: Senses- Sight and Hearing

Objective: Students will be able to identify the body parts used for sight and hearing and name the sense associate with the body parts.

Target: Students will be able to communicate what they can observe with the senses of sight and hearing.

Supplies:

- Sight/Hearing Worksheet for each child
- Chart paper
- Markers
- Reference poster from lesson 1

Procedure:

- I. Teacher will review the five senses and the body parts associated with the sense by having the students tell what they remember
- II. Teacher will ask the students what they can see, allowing for answers
- III. Teacher can have students expand answer using adjectives that they can use their eyes to determine.
- IV. Teacher will ask the students to be quiet and what can they hear
- V. Teacher have students expand answer using adjectives that they can use their ears to determine
- VI. Teacher have the students pretend they are somewhere else (barn, zoo, beach, home, underwater,...) and what would they see or hear at that location
- VII. Have students complete the worksheet
- VIII. Complete the cloze activity (whole group, independent, center- choose what is appropriate for your students)
- IX. Have students illustrate at least 5 things they can see/hear in the space provided below each sentence.

Wrap up or closure: Have a few students share their worksheets with the class

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Name _____ Date _____

eyes	hear	see	nose
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I can _____ with my _____.



I can _____ with my _____.

Lesson 3: 5 Senses: smell, taste, and touch

Objective: Students will be able to identify the senses of smell, taste and touch and identify the body part associated with the sense.

Target: Students will illustrate what they can smell, taste and touch with their own senses.

Supplies:

- Lesson 1 reference chart
- Worksheet for smell taste and touch
- Objects (five or so) for the students to smell, taste, and touch and guess
- Examples:
 - Touch: block, crayon, paperclip, bean bag, plastic animal, clay, hard sponge, crumbled up paper towel, Velcro parts, look for a variety of textures.
 - Smell :on cotton ball perfume, board cleaner, water, spray room deodorizers ..smelly objects citrus, smelly sock, food item, wet dirt
 - Taste: gummy bear, sour tart, pieces of fruit or citrus

Procedure:

- I. Teacher will review the 5 senses with the students
- II. Teachers and students will explore the examples and try to guess each object using just one sense. Teacher could either write or illustrate their own or teacher could make one large one on chart paper.
- III. Teacher should record object guess and the vocabulary the student used to tell why they think the object is what they guessed.

Wrap up or closure:

Teacher will expose what each item was and kids can determine if they were correct

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Name _____ Date _____

???What is it worksheet???

I touched...	I smelled...	I tasted.....

Lesson 4: 5 Senses Vocabulary

Objective: Students will create a word bank of words used to describe /explain properties observed through the senses.

Target: Students will create a word bank of words used to describe objects. (these words will help the students make connections to properties).

Supplies:

- Word bank worksheet for each child Chart paper with worksheet template on it
- Markers
- A few different objects that the kids can describe

Procedure: *teacher can decide if these would be better as a whole group project and then copied or have them generate one on their own.*

- I. Teacher will hold up an object for the kids to see and then ask the students words they could use to describe the object.
- II. Teacher or student writes words on charts
- III. Repeat with different objects

Wrap up or closure:

Teacher or students review chart

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Name _____ Date _____

Word Bank for the 5 senses.

 See	 Touch	 Hear	 Smell	 Taste

Lesson 5: Foss Kit Wood /Activity 1 part 1 Introduction to Wood Sample

Objective:

- Gain experience with a common material, wood.
- Observe different kinds of wood
- Compare properties of different kinds of wood found in the classroom environment
- Communicate observations made about different kinds of wood
- Learn that different kinds of wood come from different kinds of trees; some kinds of wood are processed and transformed by people
- Observe how wood interacts with water

Target: Students will explore a variety of woods

Supplies: See pages 1-5 in Foss Kit

Procedure: see pages 1-5

Extension: explore mulch

Rubric:

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Lesson 6:

Objective:

Target:

Supplies:

Procedure:

Wrap up or closure:

Rubric:

Star or Sticker	Smiley Face	Blah Face	Lesson 7: Objective
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ve:

Target:

Supplies:

Procedure:

Wrap up or closure:

Rubric:

Star or Sticker	Smiley Face	Blah Face
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Needed help completing worksheets, unable to answer questions. Does not use appropriate vocabulary. Unable to differentiate between living and non-living objects.

Lesson 8:

Objective:

Target:

Supplies:

Procedure:

Wrap up or closure:

Rubric:

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Lesson 9:

Objective:

Objective:

Target:

Supplies:

Procedure:

Wrap up or closure:

Rubric:

Star or Sticker	Smiley Face	Blah Face
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Needed help completing worksheets, unable to answer questions. Does not use appropriate vocabulary. Unable to differentiate between living and non-living objects.

Lesson
10:

Objective:

Target:

Supplies:

Procedure:

Wrap up or closure:

Rubric:

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Center or extension Activity ideas:

Use as a center and make a theme the students need to stick to (beach, ocean, park, cafeteria at school, barn, farm...)

Practice Five senses song during fluency

Have kids make a book for each sense and place it in a book center.

Have a book center on books about the five senses.

